

RAW SEQUENCE LISTING

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Application Serial Number: 10/616,009A
Source: IFW/b
Date Processed by STIC: 11/29/05

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IFW16

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/616,009A

DATE: 11/29/2005
TIME: 09:36:35

Input Set : D:\ISIS-5138.ST25.txt
Output Set: N:\CRF4\11292005\J616009A.raw

3 <110> APPLICANT: Crooke, Stanley T.
 4 Lima, Walter F.
 5 Wu, Hongjiang
 7 <120> TITLE OF INVENTION: HUMAN RNASE H1 AND OLIGONUCLEOTIDE COMPOSITIONS
 THEREOF
 9 <130> FILE REFERENCE: ISIS-5138
 11 <140> CURRENT APPLICATION NUMBER: US 10/616,009A
 12 <141> CURRENT FILING DATE: 2003-07-08
 14 <150> PRIOR APPLICATION NUMBER: US 09/409,926
 15 <151> PRIOR FILING DATE: 1999-09-30
 17 <160> NUMBER OF SEQ ID NOS: 72
 19 <170> SOFTWARE: PatentIn version 3.3
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 286
 23 <212> TYPE: PRT
 24 <213> ORGANISM: Human
 26 <400> SEQUENCE: 1
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 32 Pro Cys Arg Arg Gly Ser Arg Gly Phe Gly Met Phe Tyr Ala Val Arg
 33 20 25 30
 36 Arg Gly Arg Lys Thr Gly Val Phe Leu Thr Trp Asn Glu Cys Arg Ala
 37 35 40 45
 40 Gln Val Asp Arg Phe Pro Ala Ala Arg Phe Lys Lys Phe Ala Thr Glu
 41 50 55 60
 44 Asp Glu Ala Trp Ala Phe Val Arg Lys Ser Ala Ser Pro Glu Val Ser
 45 65 70 75 80
 48 Glu Gly His Glu Asn Gln His Gly Gln Glu Ser Glu Ala Lys Pro Gly
 49 85 90 95
 52 Lys Arg Leu Arg Glu Pro Leu Asp Gly Asp Gly His Glu Ser Ala Gln
 53 100 105 110
 56 Pro Tyr Ala Lys His Met Lys Pro Ser Val Glu Pro Ala Pro Pro Val
 57 115 120 125
 60 Ser Arg Asp Thr Phe Ser Tyr Met Gly Asp Phe Val Val Val Tyr Thr
 61 130 135 140
 64 Asp Gly Cys Cys Ser Ser Asn Gly Arg Arg Lys Pro Arg Ala Gly Ile
 65 145 150 155 160
 68 Gly Val Tyr Trp Gly Pro Gly His Pro Leu Asn Val Gly Ile Arg Leu
 69 165 170 175
 72 Pro Gly Arg Gln Thr Asn Gln Arg Ala Glu Ile His Ala Ala Cys Lys
 73 180 185 190
 76 Ala Ile Glu Gln Ala Lys Thr Gln Asn Ile Asn Lys Leu Val Leu Tyr
 77 195 200 205
 80 Thr Asp Ser Met Phe Thr Ile Asn Gly Ile Thr Asn Trp Val Gln Gly

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81      210          215          220
84 Trp Lys Lys Asn Gly Trp Lys Thr Ser Ala Gly Lys Glu Val Ile Asn
85 225          230          235          240
88 Lys Glu Asp Phe Val Ala Leu Glu Arg Leu Thr Gln Gly Met Asp Ile
89          245          250          255
92 Gln Trp Met His Val Pro Gly His Ser Gly Phe Ile Gly Asn Glu Glu
93          260          265          270
96 Ala Asp Arg Leu Ala Arg Glu Gly Ala Lys Gln Ser Glu Asp
97          275          280          285
100 <210> SEQ ID NO: 2
101 <211> LENGTH: 293
102 <212> TYPE: PRT
103 <213> ORGANISM: Chicken
105 <400> SEQUENCE: 2
107 Met Leu Arg Trp Leu Val Ala Leu Leu Ser His Ser Cys Phe Val Ser
108 1          5          10          15
111 Lys Gly Gly Gly Met Phe Tyr Ala Val Arg Lys Gly Arg Gln Thr Gly
112          20          25          30
115 Val Tyr Arg Thr Trp Ala Glu Cys Gln Gln Val Asn Arg Phe Pro
116          35          40          45
119 Ser Ala Ser Phe Lys Lys Phe Ala Thr Glu Lys Glu Ala Trp Ala Phe
120          50          55          60
123 Val Gly Ala Gly Pro Pro Asp Gly Gln Gln Ser Ala Pro Ala Glu Thr
124          65          70          75          80
127 His Gly Ala Ser Ala Val Ala Gln Glu Asn Ala Ser His Arg Glu Glu
128          85          90          95
131 Pro Glu Thr Asp Val Leu Cys Cys Asn Ala Cys Lys Arg Pro Tyr Glu
132          100         105         110
135 Gln Ser Thr Asn Glu Glu His Thr Val Arg Arg Ala Lys His Asp Glu
136          115         120         125
139 Glu Gln Ser Thr Pro Val Val Ser Glu Ala Lys Phe Ser Tyr Met Gly
140          130         135         140
143 Glu Phe Ala Val Val Tyr Thr Asp Gly Cys Cys Ser Gly Asn Gly Arg
144          145         150         155         160
147 Asn Arg Ala Arg Ala Gly Ile Gly Val Tyr Trp Gly Pro Gly His Pro
148          165         170         175
151 Leu Asn Ile Ser Glu Arg Leu Pro Gly Arg Gln Thr Asn Gln Arg Ala
152          180         185         190
155 Glu Ile His Ala Ala Cys Lys Ala Ile Glu Gln Ala Lys Ser Gln Asn
156          195         200         205
159 Ile Lys Lys Leu Ile Ile Tyr Thr Asp Ser Lys Phe Thr Ile Asn Gly
160          210         215         220
163 Ile Thr Ser Trp Val Glu Asn Trp Lys Thr Asn Gly Trp Arg Thr Ser
164          225         230         235         240
167 Ser Gly Gly Ser Val Ile Asn Lys Glu Asp Phe Gln Lys Leu Asp Ser
168          245         250         255
171 Leu Ser Lys Gly Ile Glu Ile Gln Trp Met His Ile Pro Gly His Ala
172          260         265         270
175 Gly Phe Gln Gly Asn Glu Ala Asp Arg Leu Ala Arg Glu Gly Ala

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185	<212> TYPE: PRT		
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188	<400> SEQUENCE: 3		
190	Met Ala Arg Gln Gly Asn Phe Tyr Ala Val Arg Lys Gly Arg Glu Thr		
191	1 5 10 15		
194	Gly Ile Tyr Asn Thr Trp Asn Glu Cys Lys Asn Gln Val Asp Gly Tyr		
195	20 25 30		
198	Gly Gly Ala Ile Tyr Lys Lys Phe Asn Ser Tyr Glu Gln Ala Lys Ser		
199	35 40 45		
202	Phe Leu Gly Gln Pro Asn Thr Thr Ser Asn Tyr Gly Ser Ser Thr His		
203	50 55 60		
206	Ala Gly Gly Gln Val Ser Lys Pro His Thr Thr Gln Lys Arg Val His		
207	65 70 75 80		
210	Arg Arg Asn Arg Pro Leu His Tyr Ser Ser Leu Thr Ser Ser Ala		
211	85 90 95		
214	Cys Ser Ser Leu Ser Ser Ala Asn Thr Asn Thr Phe Tyr Ser Val Lys		
215	100 105 110		
218	Ser Asn Val Pro Asn Ile Glu Ser Lys Ile Phe Asn Asn Trp Lys Asp		
219	115 120 125		
222	Cys Gln Ala Tyr Val Lys His Lys Arg Gly Ile Thr Phe Lys Lys Phe		
223	130 135 140		
226	Glu Asp Gln Leu Ala Ala Glu Asn Phe Ile Ser Gly Met Ser Ala His		
227	145 150 155 160		
230	Asp Tyr Lys Leu Met Asn Ile Ser Lys Glu Ser Phe Glu Ser Lys Tyr		
231	165 170 175		
234	Lys Leu Ser Ser Asn Thr Met Tyr Asn Lys Ser Met Asn Val Tyr Cys		
235	180 185 190		
238	Asp Gly Ser Ser Phe Gly Asn Gly Thr Ser Ser Ser Arg Ala Gly Tyr		
239	195 200 205		
242	Gly Ala Tyr Phe Glu Gly Ala Pro Glu Glu Asn Ile Ser Glu Pro Leu		
243	210 215 220		
246	Leu Ser Gly Ala Gln Thr Asn Asn Arg Ala Glu Ile Glu Ala Val Ser		
247	225 230 235 240		
250	Glu Ala Leu Lys Lys Ile Trp Glu Lys Leu Thr Asn Glu Lys Glu Lys		
251	245 250 255		
254	Val Asn Tyr Gln Ile Lys Thr Asp Ser Glu Tyr Val Thr Lys Leu Leu		
255	260 265 270		
258	Asn Asp Arg Tyr Met Thr Tyr Asp Asn Lys Lys Leu Glu Gly Leu Pro		
259	275 280 285		
262	Asn Ser Asp Leu Ile Val Pro Leu Val Gln Arg Phe Val Lys Val Lys		
263	290 295 300		
266	Lys Tyr Tyr Glu Leu Asn Lys Glu Cys Phe Lys Asn Asn Gly Lys Phe		
267	305 310 315 320		
270	Gln Ile Glu Trp Val Lys Gly His Asp Gly Asp Pro Gly Asn Glu Met		

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271	325	330	335
274 Ala Asp Phe Leu Ala Lys Lys Gly Ala Ser Arg Arg			
275	340	345	
278 <210> SEQ ID NO: 4			
279 <211> LENGTH: 155			
280 <212> TYPE: PRT			
281 <213> ORGANISM: E.coli			
283 <400> SEQUENCE: 4			
285 Met Leu Lys Gln Val Glu Ile Phe Thr Asp Gly Ser Cys Leu Gly Asn			
286 1	5	10	15
289 Pro Gly Pro Gly Gly Tyr Gly Ala Ile Leu Arg Tyr Arg Gly Arg Glu			
290	20	25	30
293 Lys Thr Phe Ser Ala Gly Tyr Thr Arg Thr Thr Asn Asn Arg Met Glu			
294	35	40	45
297 Leu Met Ala Ala Ile Val Ala Leu Glu Ala Leu Lys Glu His Cys Glu			
298	50	55	60
301 Val Ile Leu Ser Thr Asp Ser Gln Tyr Val Arg Gln Gly Ile Thr Gln			
302 65	70	75	80
305 Trp Ile His Asn Trp Lys Lys Arg Gly Trp Lys Thr Ala Asp Lys Lys			
306	85	90	95
309 Pro Val Lys Asn Val Asp Leu Trp Gln Arg Leu Asp Ala Ala Leu Gly			
310	100	105	110
313 Gln His Gln Ile Lys Trp Glu Trp Val Lys Gly His Ala Gly His Pro			
314	115	120	125
317 Glu Asn Glu Arg Cys Asp Glu Leu Ala Arg Ala Ala Ala Met Asn Pro			
318	130	135	140
321 Thr Leu Glu Asp Thr Gly Tyr Gln Val Glu Val			
322 145	150	155	
325 <210> SEQ ID NO: 5			
326 <211> LENGTH: 216			
327 <212> TYPE: PRT			
328 <213> ORGANISM: Mouse EST			
330 <400> SEQUENCE: 5			
332 Gly Ile Cys Gly Leu Gly Met Phe Tyr Ala Val Arg Arg Gly Arg Arg			
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336 Pro Gly Val Phe Leu Ser Trp Ser Glu Cys Lys Ala Gln Val Asp Arg			
337	20	25	30
340 Phe Pro Ala Ala Arg Phe Lys Lys Phe Ala Thr Glu Asp Glu Ala Trp			
341	35	40	45
344 Ala Phe Val Arg Ser Ser Ser Pro Asp Gly Ser Lys Gly Gln Glu			
345	50	55	60
348 Ser Ala His Glu Gln Lys Ser Gln Ala Lys Thr Ser Lys Arg Pro Arg			
349 65	70	75	80
352 Glu Pro Leu Val Val Tyr Thr Asp Gly Cys Cys Ser Ser Asn Gly			
353	85	90	95
356 Arg Lys Arg Ala Arg Ala Gly Ile Gly Val Tyr Trp Gly Pro Gly His			
357	100	105	110
360 Pro Leu Asn Val Arg Ile Arg Leu Pro Gly Arg Gln Thr Asn Gln Arg			
361	115	120	125

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364 Ala Glu Ile His Ala Ala Cys Lys Ala Val Met Gln Ala Lys Ala Gln
365      130          135          140
368 Asn Ile Ser Lys Leu Val Leu Tyr Thr Asp Ser Met Phe Thr Ile Asn
369      145          150          155          160
372 Gly Ile Thr Asn Trp Val Gln Gly Trp Lys Lys Asn Gly Trp Arg Thr
373           165          170          175
376 Ser Thr Gly Lys Asp Val Ile Asn Lys Glu Asp Phe Met Glu Leu Asp
377           180          185          190
380 Glu Leu Thr Gln Gly Met Asp Ile Gln Trp Met His Ile Pro Gly His
381           195          200          205
384 Ser Gly Phe Val Gly Asn Glu Glu
385           210          215
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389 <211> LENGTH: 26
390 <212> TYPE: DNA
391 <213> ORGANISM: Artificial Sequence
393 <220> FEATURE:
394 <223> OTHER INFORMATION: Oligonucleotide Primer
396 <400> SEQUENCE: 6
397 acgctggccg ggagtcgaaa tgcttc                                         26
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401 <211> LENGTH: 28
402 <212> TYPE: DNA
403 <213> ORGANISM: Artificial Sequence
405 <220> FEATURE:
406 <223> OTHER INFORMATION: Oligonucleotide Primer
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412 <210> SEQ ID NO: 8
413 <211> LENGTH: 29
414 <212> TYPE: DNA
415 <213> ORGANISM: Artificial Sequence
417 <220> FEATURE:
418 <223> OTHER INFORMATION: Oligonucleotide Primer
420 <400> SEQUENCE: 8
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425 <211> LENGTH: 29
426 <212> TYPE: DNA
427 <213> ORGANISM: Artificial Sequence
429 <220> FEATURE:
430 <223> OTHER INFORMATION: Oligonucleotide Primer
432 <400> SEQUENCE: 9
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436 <210> SEQ ID NO: 10
437 <211> LENGTH: 29
438 <212> TYPE: DNA
439 <213> ORGANISM: Artificial Sequence
441 <220> FEATURE:

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VERIFICATION SUMMARY
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